

# PRODUCT INFORMATION PACKET

Model No: 505UTDS16101

Catalog No: M760

Vertical Pump Motor, 200 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 505 PV Frame, DP



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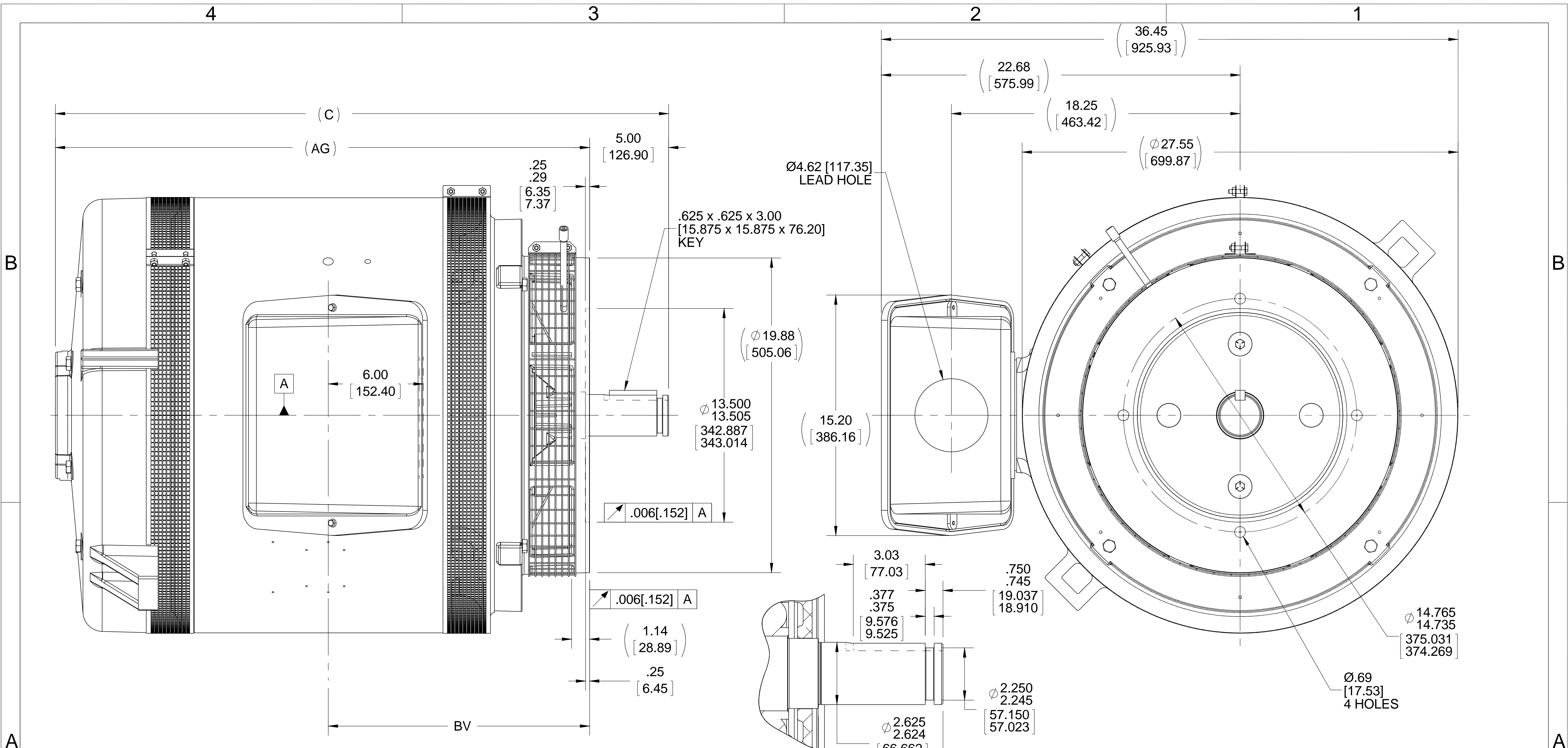
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>200 Hp</b>
Output KW	<b>149.0 kW</b>	Voltage	<b>460 V</b>
Speed	<b>886 rpm</b>	Service Factor	<b>1.15</b>
Frame	<b>505 PV</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>94.1 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>265.0 A</b>	Power Factor	<b>74</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>F</b>
Drive End Bearing Size	<b>6316</b>	Opp Drive End Bearing Size	<b>7319 2</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>22</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>8</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.032 Ohms</b>	Mounting	<b>Round</b>
Motor Orientation	<b>Shaft Down</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Duplex Tandem Angular Contact</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>P</b>	Overall Length	<b>38.75 in</b>
Shaft Diameter	<b>2.625 in</b>	Shaft Extension	<b>5 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Connection Drawing	<b>A-EE7300U</b>	Outline Drawing	<b>B-SS510025-2100</b>

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NOTE:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF THE MOTOR.  
 3. DIMENSIONS IN [ ] DESIGNATE MILLIMETERS.

DETAIL OF SHAFT EXTENSION

DASH	FRAME	C	AG	BV
2100	505P	38.76 [984.50]	33.77 [857.76]	16.52 [419.61]
2800	508P	45.76 [1162.30]	40.77 [1035.56]	20.02 [508.51]

DRAWING REVISION J	REVISION BY JJB	DATE 09-12-2016
ECO ECO-0098323	APPROVED BY DJK	DATE 09-12-2016
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	$\pm 0.1$	[ $\pm 2.5$ ]	$\pm 7' 30''$
.XX	$\pm 0.03$	[ $\pm 0.76$ ]	
.XXX	$\pm 0.005$	[ $\pm 0.127$ ]	
.XXXX	$\pm 0.0005$	[ $\pm 0.0127$ ]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH/mm 5.1 mm SHOWN IN [BRACKETS]			

DRAWN BY SMC
DATE 08-01-1991
APPROVED BY GK
DATE 08-01-1991
REFERENCE
THIRD ANGLE PROJECTION

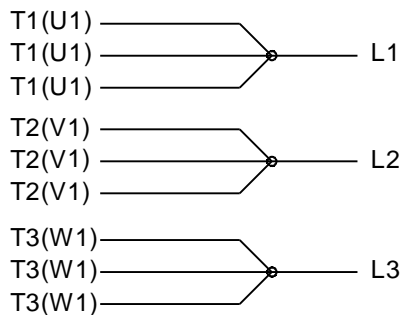
**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
**OUTLINE**  
500P FR. - BB - TS - DR. PR. - P'BASE - SCREENS

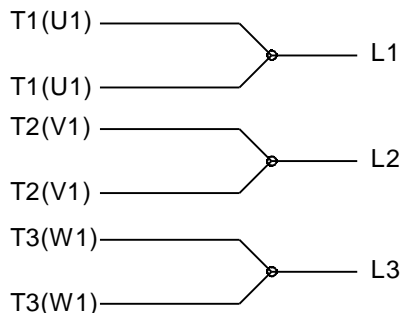
MATERIAL PROCESS/FINISH

SIZE **B** DRAWING NUMBER **SS510025** SHEET 1 OF 1

### IF MOTOR HAS 9 LEADS

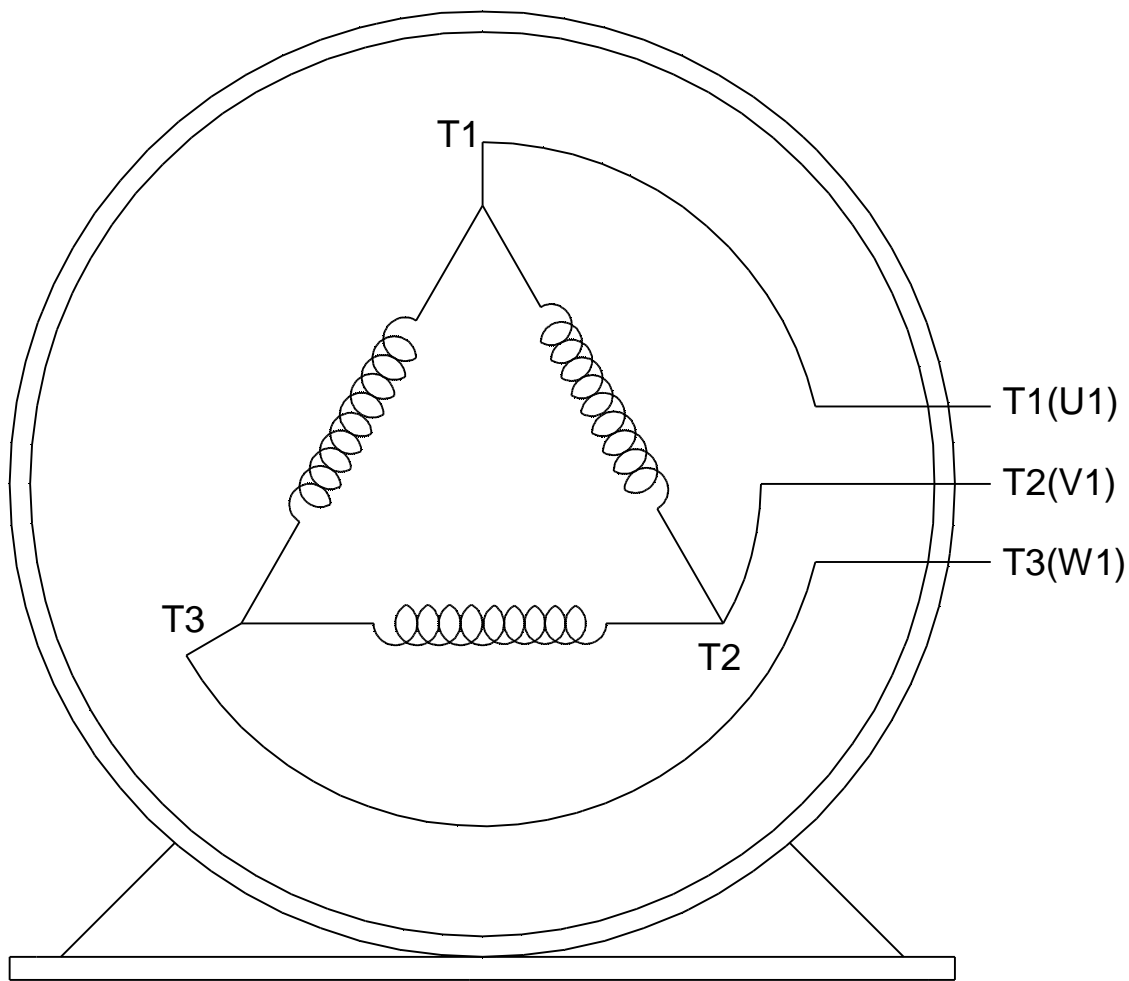
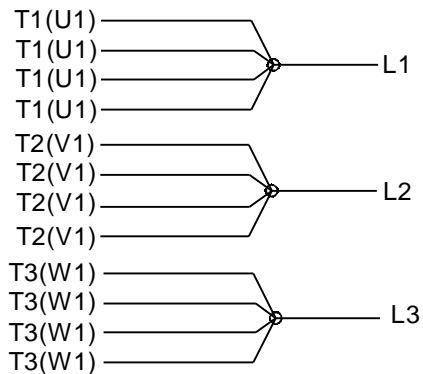


### IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

### IF MOTOR HAS 12 LEADS



## VIEW OF TERMINAL END

DRAWING REVISION <b>L</b>	REVISION BY <b>AJW</b>	DATE <b>05-04-2015</b>	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY <b>DRS</b>	<b>Regal Beloit America, Inc.</b>																			
ECO <b>ECO-0077067</b>	APPROVED BY <b>EWH</b>	DATE <b>05-05-2015</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><u>DEC.</u></td> <td style="text-align: center;"><u>INCH</u></td> <td style="text-align: center;"><u>mm</u></td> <td style="text-align: center;"><u>ANGLE</u></td> </tr> <tr> <td style="text-align: center;">.X</td> <td style="text-align: center;">±0.1</td> <td style="text-align: center;">[±2.5]</td> <td style="text-align: center;">±7' 30"</td> </tr> <tr> <td style="text-align: center;">.XX</td> <td style="text-align: center;">±0.02</td> <td style="text-align: center;">[±0.51]</td> <td></td> </tr> <tr> <td style="text-align: center;">.XXX</td> <td style="text-align: center;">±0.005</td> <td style="text-align: center;">[±0.127]</td> <td></td> </tr> <tr> <td style="text-align: center;">.XXXX</td> <td style="text-align: center;">±0.0005</td> <td style="text-align: center;">[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]
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ECO DESCRIPTION <b>UPDATED TO SOLIDWORKS</b> <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$		DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b> 3Ø SINDLE VOLTAGE																			
			APPROVED BY <b>GK</b>	DATE <b>09-30-1996</b>	MATERIAL	PROCESS/FINISH																		
			THIRD ANGLE PROJECTION	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																		

**CERTIFICATION DATA SHEET**

Model#: 505UTDS16101 AN  
 CONN. DIAGRAM: A-EE7300U  
 OUTLINE: B-SS510025-2100

WINDING#: T505836 NONE 1  
 ASSEMBLY: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN			
200	149	900	886	505 PV	DP	F	B			
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION	
3	60	460	265	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300	
FULL LOAD EFF: 94.1		3/4 LOAD EFF: 94.5		1/2 LOAD EFF: 94.1		GTD. EFF		ELEC. TYPE		NO LOAD AMPS
FULL LOAD PF: 74		3/4 LOAD PF: 70		1/2 LOAD PF: 59		93		SQ CAGE IND RUN		115
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C		
1188 LB-FT		1200		2000 LB-FT 170		2400 LB-FT 200		75		
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT				
75 dBA	85 dBA	145 LB-FT^2	- LB-FT^2	15 SEC.	-	2200 LBS.				

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	DUPLEX TANDEM ANGULAR CONTACT	POLYREX EM	P	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316	7319 2						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

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\*

INVERTER TORQUE: NONE	INV. HP SPEED RANGE: NONE
ENCODER: NONE	NONE NONE
NONE NONE PPR	
BRAKE: NONE NONE	NONE P/N NONE
NONE NONE	NONE FT-LB NONE V NONE Hz

DATE: 06/28/2017 05:35:01 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 6/19/2017

505UTDS16101

Customer: \_\_\_\_\_



Attention: \_\_\_\_\_

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

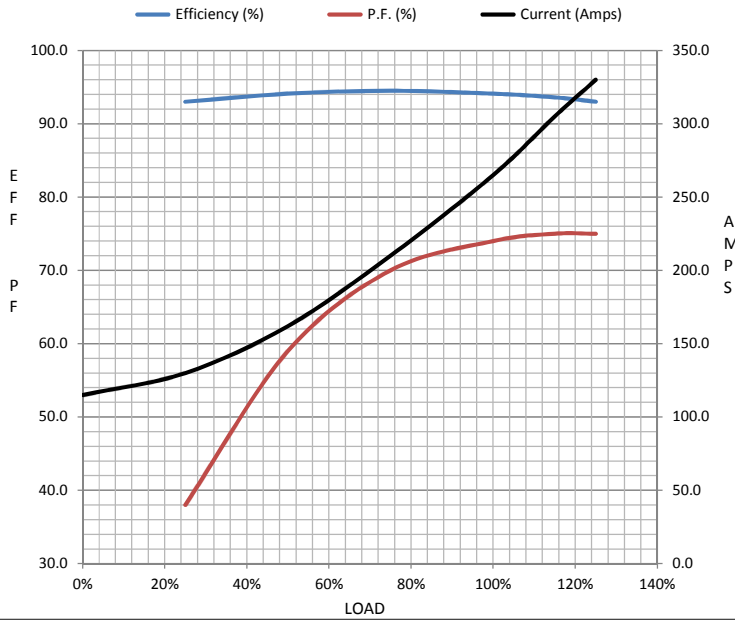
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	115	130	162	210	265	305	330	1,200
Torque (ft-lb)	0.00	293	588	886	1,188	1,370	1,495	2,000
RPM	900	896	894	890	886	884	882	0
Efficiency (%)		93.0	94.1	94.5	94.1	93.6	93.0	
P.F. (%)	2.5	38.0	59.0	70.0	74.0	75.0	75.0	33.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	300	825	886	900
Current (Amps)	1,200	1,000	700	265	115
Torque (ft-lb)	2,000	1,550	2,400	1,188	0.00

Information Block

HP	200.0
Sync. RPM	900
Frame	505
Enclosure	DP
Construction	TDS
Voltage	460 V
Frequency	60 Hz
Design	B
LR Code letter	F
Service Factor	1.15
Temp Rise @ FL	75 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wk <sup>2</sup>	145 Lb-Ft <sup>2</sup>
Ref Wdg	T505836 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	NONE
Outline Dwg	B-SS510025-2100
Conn. Diag	A-EE7300U



Additional Specifications:

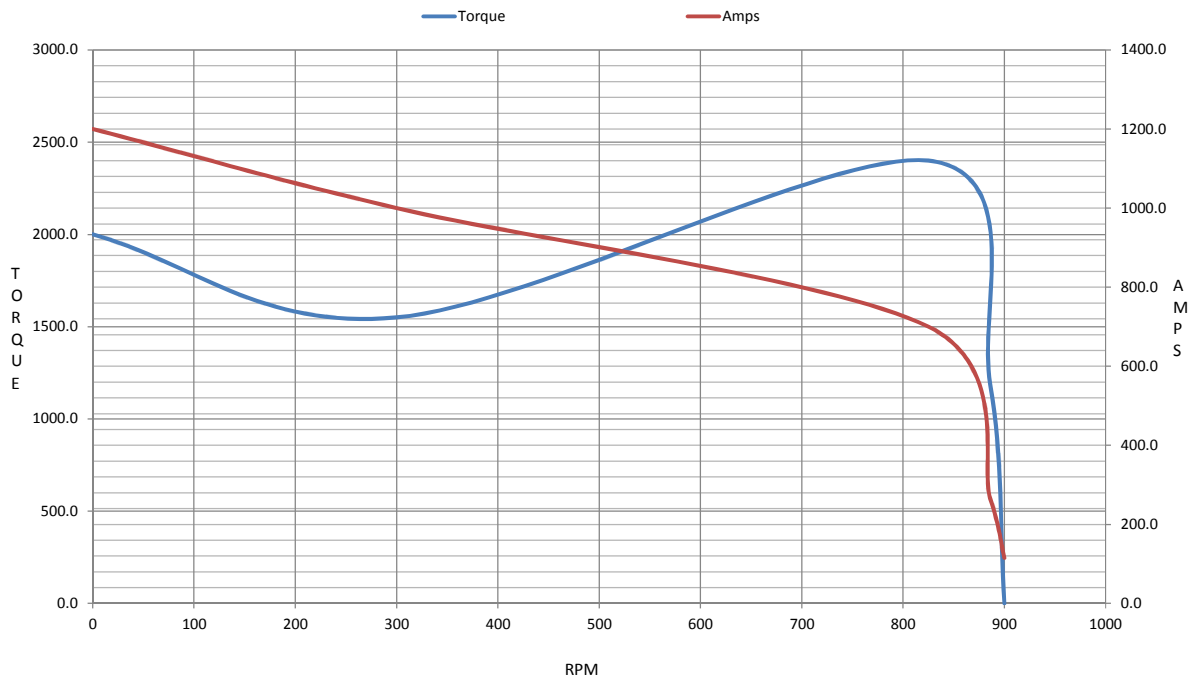
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EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0200	0.0160	0.1310	0.2220	2.1660

Speed -Torque Curve



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 505UTDS16101

(Model No. may contain prefix and/or suffix characters)

Catalog No : M760

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**